IN THE CLAIMS:

1. (Currently Amended) A method of transcoding a primary encoded signal (S1) comprising a sequence of pictures, into a secondary encoded signal (S2), said method of transcoding comprising at least the steps of: decoding a current picture of the primary encoded signal, said decoding step comprising a dequantizing sub-step (12) for producing a first transformed signal (R1), encoding, following the decoding step, for obtaining the secondary encoded signal, said encoding step comprising a quantizing sub-step (13), ~~characterized in that~~wherein said method of transcoding further comprises a filtering step between the dequantizing sub-step and the quantizing sub-step, said filtering step using a recursive filter.

2. (Currently Amended) A method of transcoding as claimed in claim 1, comprising a step of predicting a transformed motion-compensated signal ~~(Rmc)~~ from a transformed encoding error ~~(Re)~~ derived from the encoding step, said prediction step being situated between the encoding and decoding steps, ~~characterized in that~~wherein the recursive filtering step is ~~a temporal filtering step (21)~~ for receiving the transformed motion-compensated signal and the first transformed signal ~~(R1)~~ and for delivering a filtered transformed signal ~~(Rf)~~ to the quantizing sub-step.

3. (Currently Amended) A method of transcoding as claimed in claim 2, whereine~~haracterized in that~~ the ~~temporal~~recursive filtering step ~~(21)~~ is intended to use a recursive filter such as: Rf[i]=(1-.alpha.[i]) (R1[i]+Rmc[i]),where Rf[i], R1[i] and Rmc[i] are transformed coefficients comprised in the transformed signals (Rf,R1,Rmc) and .alpha.[i] is a filter coefficient comprised between 0 and 1.

4. (Currently Amended) A method of transcoding a primary encoded signal comprising a sequence of pictures, into a secondary encoded signal, said method of transcoding comprising at least the steps of:

decoding a current picture of the primary encoded signal, said decoding step comprising a dequantizing sub-step for producing a first transformed signal,

encoding, following the decoding step, for obtaining the secondary encoded signal, said encoding step comprising a quantizing sub-step, wherein said method of transcoding further comprises a filtering step between the dequantizing sub-step and the quantizing sub-step; and

~~A method of transcoding as claimed in claim 1, comprising a step of~~ predicting a transformed motion-compensated signal ~~(Rmc)~~ from a transformed encoding error ~~(Re)~~ derived from the encoding step, said prediction step being situated between the encoding and decoding steps, ~~characterized in that~~wherein the filtering step is a spatial filtering step ~~(31)~~ for receiving the first transformed signal ~~(R1)~~ and for producing a filtered transformed signal ~~(Rf)~~, said filtered transformed signal and the transformed motion-compensated signal being delivered to the quantizing sub-step ~~(13)~~.

5. (Currently Amended) A method of transcoding a primary encoded signal comprising a sequence of pictures, into a secondary encoded signal, said method of transcoding comprising at least the steps of:

decoding a current picture of the primary encoded signal, said decoding step comprising a dequantizing sub-step for producing a first transformed signal,

encoding, following the decoding step, for obtaining the secondary encoded signal, said encoding step comprising a quantizing sub-step, wherein said method of transcoding further comprises a filtering step between the dequantizing sub-step and the quantizing sub-step; and

~~A method of transcoding as claimed in claim 1, comprising a step of~~ predicting a transformed motion-compensated signal ~~(Rmc)~~ from a transformed encoding error ~~(Re)~~ derived from the encoding step, said prediction step being situated between the encoding and decoding steps, characterized in that the filtering step is a spatial filtering step ~~(41)~~ for receiving the transformed motion-compensated signal and the first transformed signal ~~(R1)~~ and for delivering a filtered transformed signal ~~(Rf)~~ to the quantizing sub-step (13), the encoding step further comprising an inverse filtering sub-step ~~(42)~~.

6. (Currently Amended) A method of transcoding a primary encoded signal comprising a sequence of pictures, into a secondary encoded signal, said method of transcoding comprising at least the steps of:

decoding a current picture of the primary encoded signal, said decoding step comprising a dequantizing sub-step for producing a first transformed signal,

encoding, following the decoding step, for obtaining the secondary encoded signal, said encoding step comprising a quantizing sub-step, wherein said method of transcoding further comprises a filtering step between the dequantizing sub-step and the quantizing sub-step; and

~~A method of transcoding as claimed in claim 1, comprising a step of~~

predicting a transformed motion-compensated signal ~~(Rmc)~~ from a transformed encoding error ~~(Re)~~ derived from the encoding step, said prediction step being situated between the encoding and decoding steps, wherein~~characterized in that~~ the filtering step is a spatial filtering step ~~(51)~~ for receiving the transformed motion-compensated signal and the first transformed signal ~~(R1)~~ and for delivering a filtered transformed signal ~~(Rf)~~ to the quantizing sub-step ~~(13)~~, said spatial filtering step being only applied to intra-coded macroblocks contained in the current picture.

7. (Original) A method of transcoding as claimed in claim 6, characterized in that it further comprises a detection step for giving a label to a current macroblock, the spatial filtering step being adapted to apply a filter to the current macroblock as a function of said label.

8. (Currently Amended) A device for transcoding a primary encoded signal ~~(S1)~~ comprising a sequence of pictures, into a secondary encoded signal ~~(S2)~~, said device comprising at least: a decoding unit for decoding a current picture of the primary encoded signal, said decoding unit comprising a dequantizing circuit ~~(12)~~ for producing a first transformed signal ~~(R1)~~, an encoding unit for obtaining the secondary encoded signal, said encoding unit comprising a quantizing circuit ~~(13)~~, characterized in that said transcoding device further comprises a recursive filter circuit between the dequantizing circuit and the quantizing circuit.

9. (Currently Amended) A transcoding device as claimed in claim 8, comprising a prediction unit for predicting a transformed motion-compensated signal ~~(Rmc)~~ from a transformed encoding error ~~(Re)~~ derived from the encoding unit, said prediction unit being situated between the encoding unit and the decoding unit, wherein~~characterized in that~~ the recursive filter circuit is ~~a temporal filter circuit (21)~~ for receiving the transformed motion-compensated signal and the first transformed signal ~~(R1)~~ and for delivering a filtered transformed signal ~~(Rf)~~ to the quantizing circuit ~~(13)~~.

10. (Currently Amended) A device for transcoding a primary encoded signal comprising a sequence of pictures, into a secondary encoded signal, said device comprising at least: a decoding unit for decoding a current picture of the primary encoded signal, said decoding unit comprising a dequantizing circuit for producing a first

transformed signal, an encoding unit for obtaining the secondary encoded signal, said encoding unit comprising a quantizing circuit, said transcoding device further comprising:

a filter circuit between the dequantizing circuit and the quantizing circuit;~~A transcoding device as claimed in claim 8, comprising~~ and

a prediction unit for predicting a transformed motion-compensated signal ~~(Rmc)~~ from a transformed encoding error ~~(Re)~~ derived from the encoding unit, said prediction unit being situated between the encoding unit and the decoding unit,

wherein~~characterized in that~~ the filter circuit is a spatial filter circuit ~~(31)~~ for receiving the first transformed signal ~~(R1)~~ and for producing a filtered transformed signal ~~(Rf)~~, said filtered transformed signal and the transformed motion-compensated signal being delivered to the quantizing circuit ~~(13)~~.

11. (Currently Amended) A device for transcoding a primary encoded signal comprising a sequence of pictures, into a secondary encoded signal, said device comprising at least: a decoding unit for decoding a current picture of the primary encoded signal, said decoding unit comprising a dequantizing circuit for producing a first transformed signal, an encoding unit for obtaining the secondary encoded signal, said encoding unit comprising a quantizing circuit, wherein said transcoding device further comprises:

a filter circuit between the dequantizing circuit and the quantizing circuit~~A transcoding device as claimed in claim 8, comprising~~

a prediction unit for predicting a transformed motion-compensated signal ~~(Rmc)~~ from a transformed encoding error ~~(Re)~~ derived from the encoding unit, said prediction unit being situated between the encoding unit and the decoding unit,

wherein~~characterized in that~~ the filter circuit is a spatial filter circuit ~~(41)~~ for receiving

the transformed motion-compensated signal and the first transformed signal ~~(R1)~~ and for delivering a filtered transformed signal ~~(Rf)~~ to the quantizing circuit ~~(13)~~, the encoding unit further comprising an inverse filter circuit ~~(42)~~.

12. A device for transcoding a primary encoded signal (S1) comprising a sequence of pictures, into a secondary encoded signal (S2), said device comprising at least: a decoding unit for decoding a current picture of the primary encoded signal, said decoding unit comprising a dequantizing circuit (12) for producing a first transformed signal (R1), an encoding unit for obtaining the secondary encoded signal, said encoding unit comprising a quantizing circuit (13), wherein said transcoding device further comprises a filter circuit between the dequantizing circuit and the quantizing circuit~~A transcoding device as claimed in claim 8, comprising~~

_____a prediction unit for predicting a transformed motion-compensated signal ~~(Rmc)~~ from a transformed encoding error ~~(Re)~~ derived from the encoding unit, said prediction unit being situated between the encoding and decoding units, wherein~~characterized in that~~ the filter circuit is a spatial filter circuit ~~(51)~~ for receiving the transformed motion-compensated signal and the first transformed signal ~~(R1)~~ and for delivering a filtered transformed signal ~~(Rf)~~ to the quantizing circuit ~~(13)~~, said spatial filter circuit being only applied to intra-coded macroblocks contained in the current picture.

13. (Original) A transcoding device as claimed in claim 12, characterized in that it further comprises a detection circuit for giving a label to a current macroblock, the spatial filter circuit being adapted to apply a filter to the current macroblock as a function of said label.

14. (Original) A computer program product for a digital video recorder, which

computer program product comprises a set of instructions, which, when loaded into said digital video recorder, causes the digital video recorder to carry out the method as claimed in claim 1.

15. (Original) A computer program product for a set-top-box, which computer program product comprises a set of instructions, which, when loaded into said set-top-box, causes the set-top-box to carry out the method as claimed in claim 1.